

ABSTRACT OF THE DISCLOSURE

A zinc or zinc/alloy surface of a metal artifact is protected by passivating or activating the surface with a solution comprising an oxidizing acid or activating acid; applying to the surface an aqueous priming solution of an alkali metal permanganate in the presence of halogen ions, with the solution having a pH of about 1 to 8; and then further applying to the surface an aqueous sealing solution such as a lithium silicate and a sodium or potassium silicate solution. Strong corrosion protection can be achieved. Improvements may also be obtained with the addition of a rare earth salt to the priming solution.